

EXAMINER'S AMENDMENT

Acknowledgement

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive being of the amendments to the claims. Therefore, the finality of that action is withdrawn and the prosecution is reopened. The examiner's amendment is being submitted to move the case in condition for allowance.

Amendment to the claims

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Beck on 9/23/08.

The application has been amended as follows:

Claim 7:

A method of removing particulate debris from a vessel using a catheter assembly the method comprising:

inserting and advancing a sheath having a discharge lumen to a location in the vessel said delivery sheath discharge lumen coupled to a collection vessel, said sheath not having an occlusion balloon thereon such that said sheath partially blocks the vessel but allowing some blood flow in the vessel;

inserting and advancing an interventional device to a treatment location said interventional device of type having;

an elongate body enclosing a fluid supply lumen and an angioplasty therapy inflation lumen;

~~an angioplasty therapy balloon for delivering angioplasty treatment located near the distal tip of said elongate body;~~

said elongate body having a central axis extending in the direction of the therapy balloon;

a gap communicating with said fluid supply lumen for introducing a primary fluid jet flow in said vessel, said gap located distal of a said therapy balloon, said gap projecting said fluid jet in an initial direction away from the central axis of the interventional device; a tapered said wall located immediately adjacent said gap, and forming an annular surface next to the gap on the interventional device;

said wall serving to restrict entrainment of fluid by said primary fluid flow, thereby creating a pressure difference across said primary fluid jet flow such that said primary fluid flow turns through an angle away from said initial direction away from said wall and turns toward said wall thereby exhibiting the Coanda effect ~~and thereby~~;

delivering angioplasty treatment located near the distal tip of said elongate body;
injecting a primary fluid; and
promoting retrograde flow into said discharge lumen.

Claim 28:

A method of removing particulate debris from a vessel using a catheter assembly the method comprising:

inserting and advancing a sheath having a discharge lumen to a location in the vessel said delivery sheath discharge lumen coupled to a collection vessel; said sheath not having an occlusion balloon thereon such that said sheath partially blocks the vessel but allowing some blood flow in the vessel;

inserting and advancing an interventional device to a treatment location said interventional device of type having;

an elongate body enclosing a fluid supply lumen and a stent delivery inflation lumen;

~~a stent deployment balloon for delivering stent treatment located near the distal tip of said elongate body;~~

a gap communicating with said fluid supply lumen for introducing a primary fluid flow in said vessel, said gap located distal of ~~said a stent deployment balloon~~, said gap projecting fluid in an initial direction away from the central axis of the interventional device; ~~said a tapered~~ wall located immediately adjacent said gap; and forming an annular surface next to the gap on the interventional device;

said wall serving to restrict entrainment of fluid by said primary fluid flow, thereby creating a pressure difference across said primary fluid flow such that said primary fluid flow turns through an angle away from said initial direction of the toward said wall thereby exhibiting the Coanda effect ~~thereby~~;

delivering stent treatment located near the distal tip of said elongate body;

injecting a primary fluid; and

promoting retrograde flow into said discharge lumen.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The subject matter of the independent claims could either not be found or was not suggested in the prior art of record. The subject matter not found are methods for removing particulate debris that includes a deployment sheath that has an interventional device inserted through the sheath, wherein the device further includes an elongated body that has a treatment element (for claim 7 an angioplasty balloon and for claim 28 a stent deployment balloon) and a gap located adjacent a tapered wall that promotes retrograde flow when fluid is injected into the interventional device.

The independent claims also include other patentable subject matter in combination with the other elements or steps of the claim not mention in the above paragraph.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW F. DESANTO whose telephone number is (571)272-4957. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick LUCCHESI can be reached on (571) 272-4977. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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